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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,194	02/20/2001	Kazunobu Fujikawa	Q63075	3832

7590

09/11/2002

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EXAMINER

ELVE, MARIA ALEXANDRA

ART UNIT

PAPER NUMBER

1725

DATE MAILED: 09/11/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/763,194

Applicant(s)

Fujikawa et al.

Examiner

M. Alexandra Elve

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1725



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/25/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above, claim(s) 1-5 & 11-13 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10 is/are allowed.
- 6) ☒ Claim(s) 6-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Election/Restriction***

1. Applicant's election with traverse of group II in Paper No. 8 is acknowledged. The traversal is on the ground(s) that the technical features must include a wire electrode of a core wire. This is not found persuasive because the apparatus may be used for cutting and/or joining of materials and the electrode product may be used in welding applications.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 1-5 & 11-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 8.

### ***Claim Rejections - 35 USC § 112***

3. Claims 6 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 6 states "generates an electric". Claim 9 states that there is a "preparatory step of surface discharge processing" while in claim 1 is states that the surface discharge processing entails the surface reforming layer.

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***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US Pat. 3,741,426) in view of Moro et al. (US Pat. 6,348,668) and JP (2-24025).

Inoue discloses an apparatus for the spark discharge treatment of a conductive workpiece. A highly uniform layer or deposit is produced on a workpiece. The workpiece and the electrode are brought into localized contact creating a spark between them and leaving a hardened area or deposit. Inoue does not disclose the use of two electrodes or the composition of the wire.

Moro et al. discloses the use of two electrodes for surface treatment. One of the electrodes is used for the formation of a hard coating film, while the other is used for machining. It would have been obvious to one of ordinary skill in the art at the time of the invention to use two electrodes, as taught by Moro et al. in the Inoue system because it merely adds for versatility and efficiency to the apparatus.

JP(2-24025) discloses a wire discharge processing electrode wire which is made of a core wire and has a coating of zinc. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the wire as taught by JP in the Inoue system because it would increase machining speed and accuracy.

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***Allowable Subject Matter***

6. Claim 10 is allowed.

7. The following is an examiner's statement of reasons for allowance: the claims as supported by the specification differs from the prior art in that it does not teach an apparatus which uses two wire electrodes for removal processing and surface reforming whereby a wire electrode feeder feeds both wires, using a wire electrode changeover unit to select the required electrode.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***


8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See US PTO-892.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Alexandra Elve whose telephone number is (703) 308-0092. The examiner can normally be reached Monday to Friday from 6:30 AM to 3:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn, can be reached on (703) 308-3318.

Any inquiry of general nature to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 308-0661.



M. ALEXANDRA ELVE  
PRIMARY EXAMINER

September 9, 2002.